

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1 to 25 (Cancelled).

26. (Currently Amended) A method for controlling ~~blood ultrafiltration~~filtration of blood using ~~an ultrafiltration blood~~ an extracorporeal circuit having a filter and said circuit attachable to a pump having a controller, the method comprising the steps of:

a. ~~withdrawing the blood from a withdrawal blood vessel in a patient into the extracorporeal circuit, filtering liquid ultrafiltrate from the blood in the circuit containing a blood filter and infusing the filtered blood into the patient in a~~  
continuous and simultaneous manner;

b. monitoring withdrawal and/or infusion pressure of the blood;

c. based on the withdrawal or infusion pressure, detecting an occlusion  
which at least partially blocks the withdrawal or infusion of the blood;

d. in response to the detection of the occlusion controller automatically  
reducing blood flow and reducing ultrafiltratefiltrate flow through the circuit;

e. detecting an alleviation of the occlusion, and

f. automatically increasing the blood flow and ultrafiltratefiltrate flow  
after the occlusion has been alleviated and without a human operator intervening  
in the operation of the pump.

27. (Currently Amended) A method for controlling ~~blood-ultrafiltrate~~ filtration as in claim 26 further comprising the step (gf) of prompting the patient to move to alleviate the occlusion.

28. (Currently Amended) A method for controlling ~~blood-ultrafiltration~~ filtration as in claim 26 wherein step (de) includes reducing a speed of a filtrate pump to reduce the ultrafiltrate flow.

29. (Currently Amended) A method for controlling ~~blood-ultrafiltration~~ filtration as in claim 26 wherein step (de) includes temporarily ceasing the ~~ultrafiltrate~~ flow.

30. (Currently Amended) A method for controlling ~~blood-ultrafiltration~~ filtration as in claim 26 wherein step (de) ~~includes~~ further comprises monitoring ~~ultrafiltrate~~ pressure between the filter and the ~~ultrafiltrate~~ pump.

Claims 31 to 38 (Cancelled).

39. (New) A method for controlling filtration as in claim 26 wherein step (d) further comprises of limiting filtrate as a maximum proportional of blood flow.

40. (New) A method for controlling filtration of blood using an extracorporeal circuit having a filter and attachable to a pump having a controller, the method comprising:

a. withdrawing blood from a blood vessel in a patient into the extracorporeal circuit, filtering liquid from the extracorporeal blood in the circuit and infusing the filtered blood into a blood vessel in the patient in a continuous and simultaneous manner;

- b. monitoring withdrawal and infusion pressure of the blood;
- c. based on the withdrawal or infusion pressure, detecting an occlusion which at least partially blocks the withdrawal or infusion blood flow;
- d. in response to the detection of the occlusion controller automatically reduces blood flow through the circuit and limits the filtrate flow to a maximum proportion of the blood flow;
- e. detecting an alleviation of the occlusion, and
- f. automatically increasing the blood flow and filtrate flow after the occlusion has been alleviated and without a human operator intervening.

41. (New) A method for controlling filtration as in claim 40 further comprising the step (g) of prompting the patient to move to alleviate the occlusion.

42. (New) A method for controlling filtration as in claim 40 wherein step (d) includes reducing a speed of a filtrate pump to reduce the ultrafiltrate flow.

43. (New) A method for controlling filtration as in claim 40 wherein step (c) includes temporarily ceasing the filtrate flow.

44. (New) A method for controlling filtration as in claim 40 wherein step (d) further comprises monitoring filtrate pressure between the filter and the pump.